

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: _____

Source: _____

Date Processed by STIC: _____

10/573,369

TFW0

01/25/2007

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IFWO

RAW SEQUENCE LISTING

DATE: 01/25/2007

PATENT APPLICATION: US/10/573,369

TIME: 11:59:35

Input Set : F:\ARS-126-SEQ LIST.txt

Output Set: N:\CRF4\01252007\J573369.raw

```

3 <110> APPLICANT: Applied Research Systems ARS Holding N.V.
5 <120> TITLE OF INVENTION: Novel leader sequences for use in production of proteins
7 <130> FILE REFERENCE: 884 WO
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/573,369
C--> 9 <141> CURRENT FILING DATE: 2006-03-24
9 <160> NUMBER OF SEQ ID NOS: 58
11 <170> SOFTWARE: PatentIn version 3.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 29
15 <212> TYPE: PRT
16 <213> ORGANISM: Artificial
18 <220> FEATURE:
19 <221> NAME/KEY: source
20 <223> OTHER INFORMATION: /note="Description of artificial sequence: IgSP-tPA pre-
propeptide"
22 <220> FEATURE:
23 <221> NAME/KEY: SIGNAL
24 <222> LOCATION: (1)..(19)
25 <223> OTHER INFORMATION: murine immunoglobulin signal peptide
28 <220> FEATURE:
29 <221> NAME/KEY: PROPEP
30 <222> LOCATION: (20)..(29)
31 <223> OTHER INFORMATION: human tissue plasminogen activator propeptide
34 <400> SEQUENCE: 1
36 Met Lys Cys Ser Trp Val Ile Phe Phe Leu Met Ala Val Val Thr Gly
37 1 5 10 15
40 Val Asn Ser Ser Gln Glu Ile His Ala Arg Phe Arg Arg
41 20 25
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 35
46 <212> TYPE: PRT
47 <213> ORGANISM: Homo sapiens
49 <400> SEQUENCE: 2
51 Met Asp Ala Met Lys Arg Gly Leu Cys Cys Val Leu Leu Leu Cys Gly
52 1 5 10 15
55 Ala Val Phe Val Ser Pro Ser Gln Glu Ile His Ala Arg Phe Arg Arg
56 20 25 30
59 Gly Ala Arg
60 35
63 <210> SEQ ID NO: 3
64 <211> LENGTH: 19
65 <212> TYPE: PRT
66 <213> ORGANISM: Mus musculus
68 <220> FEATURE:

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69 <221> NAME/KEY: SIGNAL
70 <222> LOCATION: (1)..(19)
71 <223> OTHER INFORMATION:
W--> 73 <400> 3
75 Met Lys Cys Ser Trp Val Ile Phe Phe Leu Met Ala Val Val Thr Gly
76 1          5          10          15
79 Val Asn Ser
83 <210> SEQ ID NO: 4
84 <211> LENGTH: 26
85 <212> TYPE: PRT
86 <213> ORGANISM: Homo sapiens
88 <220> FEATURE:
89 <221> NAME/KEY: SIGNAL
90 <222> LOCATION: (1)..(26)
91 <223> OTHER INFORMATION:
W--> 93 <400> 4
95 Met Ala Thr Gly Ser Arg Thr Ser Leu Leu Leu Ala Phe Gly Leu Leu
96 1          5          10          15
99 Cys Leu Pro Trp Leu Gln Glu Gly Ser Ala
100          20          25
103 <210> SEQ ID NO: 5
104 <211> LENGTH: 17
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
108 <220> FEATURE:
109 <221> NAME/KEY: SIGNAL
110 <222> LOCATION: (1)..(17)
111 <223> OTHER INFORMATION:
W--> 113 <400> 5
115 Met Leu Leu Leu Leu Leu Leu Gly Leu Arg Leu Gln Leu Ser Leu
116 1          5          10          15
119 Gly
123 <210> SEQ ID NO: 6
124 <211> LENGTH: 87
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial
128 <220> FEATURE:
129 <221> NAME/KEY: source
130 <223> OTHER INFORMATION: /note="Description of artificial sequence: nucleic acid
encoding IgSP-tPA pre-propeptide"
132 <400> SEQUENCE: 6
133 atgaagtgca gctgggtgat cttcttctctg atggccgtgg tgaccggcgt gaattccagc      60
135 caggagatcc acgccagggt cgcaga      87
138 <210> SEQ ID NO: 7
139 <211> LENGTH: 105
140 <212> TYPE: DNA
141 <213> ORGANISM: Homo sapiens
143 <400> SEQUENCE: 7
144 atggacgcc tgaagcgcg cctgtgctgc gtgctgctgc tgtgcggcgc cgtgttcgtg      60
146 agccccagcc aggagatcca cgccagggtc cgcagaggcg ccaga      105

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149 <210> SEQ ID NO: 8
150 <211> LENGTH: 57
151 <212> TYPE: DNA
152 <213> ORGANISM: Mus musculus
154 <400> SEQUENCE: 8
155 atgaagtgca gctgggtgat cttcttctctg atggccgtgg tgaccggcgt gaattcc 57
158 <210> SEQ ID NO: 9
159 <211> LENGTH: 161
160 <212> TYPE: PRT
161 <213> ORGANISM: Homo sapiens
163 <400> SEQUENCE: 9
165 Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser
166 1 5 10 15
169 Ile Cys Cys Thr Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys
170 20 25 30
173 Pro Gly Pro Gly Gln Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser
174 35 40 45
177 Phe Thr Ala Ser Glu Asn His Leu Arg His Cys Leu Ser Cys Ser Lys
178 50 55 60
181 Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp
182 65 70 75 80
185 Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr Trp
186 85 90 95
189 Ser Glu Asn Leu Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn Gly
190 100 105 110
193 Thr Val His Leu Ser Cys Gln Glu Lys Gln Asn Thr Val Cys Thr Cys
194 115 120 125
197 His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val Ser Cys Ser Asn
198 130 135 140
201 Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu
202 145 150 155 160
205 Asn
209 <210> SEQ ID NO: 10
210 <211> LENGTH: 239
211 <212> TYPE: PRT
212 <213> ORGANISM: Homo sapiens
214 <400> SEQUENCE: 10
216 Met Leu Leu Ser Gln Asn Ala Phe Ile Val Arg Ser Leu Asn Leu Val
217 1 5 10 15
220 Leu Met Val Tyr Ile Ser Leu Val Phe Gly Ile Ser Tyr Asp Ser Pro
221 20 25 30
224 Asp Tyr Thr Asp Glu Ser Cys Thr Phe Lys Ile Ser Leu Arg Asn Phe
225 35 40 45
228 Arg Ser Ile Leu Ser Trp Glu Leu Lys Asn His Ser Ile Val Pro Thr
229 50 55 60
232 His Tyr Thr Leu Leu Tyr Thr Ile Met Ser Lys Pro Glu Asp Leu Lys
233 65 70 75 80
236 Val Val Lys Asn Cys Ala Asn Thr Thr Arg Ser Phe Cys Asp Leu Thr
237 85 90 95

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240 Asp Glu Trp Arg Ser Thr His Glu Ala Tyr Val Thr Val Leu Glu Gly
241          100          105          110
244 Phe Ser Gly Asn Thr Thr Leu Phe Ser Cys Ser His Asn Phe Trp Leu
245          115          120          125
248 Ala Ile Asp Met Ser Phe Glu Pro Pro Glu Phe Glu Ile Val Gly Phe
249          130          135          140
252 Thr Asn His Ile Asn Val Met Val Lys Phe Pro Ser Ile Val Glu Glu
253 145          150          155          160
256 Glu Leu Gln Phe Asp Leu Ser Leu Val Ile Glu Glu Gln Ser Glu Gly
257          165          170          175
260 Ile Val Lys Lys His Lys Pro Glu Ile Lys Gly Asn Met Ser Gly Asn
261          180          185          190
264 Phe Thr Tyr Ile Ile Asp Lys Leu Ile Pro Asn Thr Asn Tyr Cys Val
265          195          200          205
268 Ser Val Tyr Leu Glu His Ser Asp Glu Gln Ala Val Ile Lys Ser Pro
269          210          215          220
272 Leu Lys Cys Thr Leu Leu Pro Pro Gly Gln Glu Ser Glu Phe Ser
273 225          230          235
276 <210> SEQ ID NO: 11
277 <211> LENGTH: 34
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial
281 <220> FEATURE:
282 <221> NAME/KEY: source
283 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
285 <400> SEQUENCE: 11
286 tgctctagag cgtcacccct agagtcgagc tgtg          34
289 <210> SEQ ID NO: 12
290 <211> LENGTH: 59
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial
294 <220> FEATURE:
295 <221> NAME/KEY: source
296 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
298 <400> SEQUENCE: 12
299 ggcgttgagc ggccgcgggt catgacgcta gcaccgaatt caccctgta accactgcc          59
302 <210> SEQ ID NO: 13
303 <211> LENGTH: 51
304 <212> TYPE: DNA
305 <213> ORGANISM: Artificial
307 <220> FEATURE:
308 <221> NAME/KEY: source
309 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
311 <400> SEQUENCE: 13
312 cgcagatctg gtctcgcatg aagtgcagct gggatgatctt cttcctgatg g          51
315 <210> SEQ ID NO: 14
316 <211> LENGTH: 43
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial

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320 <220> FEATURE:
321 <221> NAME/KEY: source
322 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
324 <400> SEQUENCE: 14
325 ccgtggtgac cggcgtgaat tccgacagcg tgtgccctca ggg                43
328 <210> SEQ ID NO: 15
329 <211> LENGTH: 52
330 <212> TYPE: DNA
331 <213> ORGANISM: Artificial
333 <220> FEATURE:
334 <221> NAME/KEY: source
335 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
337 <400> SEQUENCE: 15
338 caagtacatc caccctcaga acaacagcat ctgctgcacc aagtgccaca ag        52
341 <210> SEQ ID NO: 16
342 <211> LENGTH: 26
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial
346 <220> FEATURE:
347 <221> NAME/KEY: source
348 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
350 <400> SEQUENCE: 16
351 ggcacctacc tgtacaacga ctgccc                26
354 <210> SEQ ID NO: 17
355 <211> LENGTH: 51
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial
359 <220> FEATURE:
360 <221> NAME/KEY: source
361 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
363 <400> SEQUENCE: 17
364 gggcagtcgt tgtacaggta ggtgcccttg tggcacttgg tgcagcagat g        51
367 <210> SEQ ID NO: 18
368 <211> LENGTH: 48
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial
372 <220> FEATURE:
373 <221> NAME/KEY: source
374 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
376 <400> SEQUENCE: 18
377 ctgttggttct gaggggtggat gtacttgccc tgagggcaca cgctgtcg        48
380 <210> SEQ ID NO: 19
381 <211> LENGTH: 48
382 <212> TYPE: DNA
383 <213> ORGANISM: Artificial
385 <220> FEATURE:
386 <221> NAME/KEY: source
387 <223> OTHER INFORMATION: /note="Description of artificial sequence: primer"
389 <400> SEQUENCE: 19

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RAW SEQUENCE LISTING ERROR SUMMARY

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Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:6; Line(s) 130

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,6,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33

Seq#:34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,51,52,53,54,55,56,57,58

VERIFICATION SUMMARY

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:73 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:71

L:93 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:4,Line#:91

L:113 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:111